

CRF Errors Corrected by the STIC System Branch

1644
1/31/2003
CRF Processing Date: 1/31/2003
Edited by:
Verified by: (STIC staff)

Serial Number: 09/155, S14

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ENTERED

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☒ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: 1
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

*Examiner: Th above corrections must b communicated to th applicant in th first Office Action. DO NOT send a copy of this form. 3/1/95

RAW SEQUENCE LISTING PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:21:00

Input Set: I155514.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

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1  <110> APPLICANT: Kainoh, Mie
2      Tanaka, Toshiaki
3  <120> TITLE OF INVENTION: Chimeric proteins, their heterodimer complexes, and plate
4      substitutes
5  <130> FILE REFERENCE: 1102-98
6  <140> CURRENT APPLICATION NUMBER: US/09/155,514
7  <141> CURRENT FILING DATE: 1998-11-17
8  <150> EARLIER APPLICATION NUMBER: PCT/JP98/00370
9  <151> EARLIER FILING DATE: 1997-01-29
10 <150> EARLIER APPLICATION NUMBER: JP 9-15118
11 <151> EARLIER FILING DATE: 1997-01-29
12 <150> EARLIER APPLICATION NUMBER: JP 9-234544
13 <151> EARLIER FILING DATE: 1997-08-29
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15 <170> SOFTWARE: Wordperfect 8.0
16 <210> SEQ ID NO 1
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18 <212> TYPE: DNA
19 <213> ORGANISM: Homo sapien
20 <220> FEATURE:
21 <221> NAME/KEY: CDS
22 <222> LOCATION: 1...2958, 3316...3360, 3480...3808, 3905...4228
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29      Gly Pro Glu Ala Ala Leu Arg Glu Thr Val Met Leu Leu Leu Cys Leu
30              -20                      -15                      -10
31      ggg gtc ccg acc ggc agg cct tac aac gtg gac act gag agc gcg ctg      144
32      Gly Val Pro Thr Gly Arg Pro Tyr Asn Val Asp Thr Glu Ser Ala Leu
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34      ctt tac cag ggc ccc cac aac acg ctg ttc ggc tac tcg gtc gtg ctg      192
35      Leu Tyr Gln Gly Pro His Asn Thr Leu Phe Gly Tyr Ser Val Val Leu
36      10                      15                      20                      25
37      cac agc cac ggg gcg aac cga tgg ctc cta gtg ggt gcg ccc act gcc      240
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39              30                      35                      40
40      aac tgg ctc gcc aac gct tca gtg atc aat ccc ggg gcg att tac aga      288
41      Asn Trp Leu Ala Asn Ala Ser Val Ile Asn Pro Gly Ala Ile Tyr Arg
42              45                      50                      55
43      tgc acg atc gga aag aat ccc ggc cag acg tgc gaa cag ctc cag ctg      336
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45																			
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56	Lys	Asn	Glu	Asn	Lys	Leu	Pro	Thr	Gly	Gly	Cys	Tyr	Gly	Val	Pro	Pro			
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58	gat	tta	cga	aca	gaa	ctg	agt	aaa	aga	ata	gct	ccg	tgt	tat	caa	gat			576
59	Asp	Leu	Arg	Thr	Glu	Leu	Ser	Lys	Arg	Ile	Ala	Pro	Cys	Tyr	Gln	Asp			
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62	Tyr	Val	Lys	Lys	Phe	Gly	Glu	Asn	Phe	Ala	Ser	Cys	Gln	Ala	Gly	Ile			
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64	tcc	agt	ttt	tac	aca	aag	gat	tta	att	gtg	atg	ggg	gcc	cca	gga	tca			672
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72			205					210					215						
73	tta	gga	tat	tca	gtc	gga	gct	ggt	cat	ttt	cgg	agc	cag	cat	act	acc			816
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77	Glu	Val	Val	Gly	Gly	Ala	Pro	Gln	His	Glu	Gln	Ile	Gly	Lys	Ala	Tyr			
78			235					240				245							
79	ata	ttc	agc	att	gat	gaa	aaa	gaa	cta	aat	atc	tta	cat	gaa	atg				

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:21:00

Input Set: I155514.RAW

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101	Asp Leu Gln Gly Ala Ile Tyr Ile Tyr Asn Gly Arg Ala Asp Gly Ile	
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103	tcg tca acc ttc tca cag aga att gaa gga ctt cag atc agc aaa tcg	1296
104	Ser Ser Thr Phe Ser Gln Arg Ile Glu Gly Leu Gln Ile Ser Lys Ser	
105	380 385 390	
106	tta agt atg ttt gga cag tct ata tca gga caa att gat gca gat att	1344
107	Leu Ser Met Phe Gly Gln Ser Ile Ser Gly Gln Ile Asp Ala Asp Asn	
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109	aat ggc tat gta gat gta gca ggt cgt gct ttt cgg tct gat tct gct	1392
110	Asn Gly Tyr Val Asp Val Ala Val Gly Ala Phe Arg Ser Asp Ser Ala	
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112	gtc ttg cta agg aca aga cct gta gta att gtt gac gct tct tta agc	1440
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131	Ala Asn Cys Arg Thr His Gln Ala Phe Met Arg Lys Asp Val Arg Asp	
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134	Ile Leu Thr Pro Ile Gln Ile Glu Ala Ala Tyr His Leu Gly Pro His	
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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

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159	670 675 680	
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164	Asp Val Ser Ser Leu Ser Arg Ala Glu Glu Asp Leu Ser Ile Thr Val	
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171	730 735 740 745	
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175	aat gag cct gaa acg tgc atg gtg gag aaa atg aac tta act ttc cat	2448
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190	ggc ata gtc cgg ttc ttg tcc aag act gat aag agg cta ttg tac tgc	2688
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194	Ile Lys Ala Asp Pro His Cys Leu Asn Phe Leu Cys Asn Phe Gly Lys	

Input Set: I155514.RAW

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000

TIME: 13:21:00

Input Set: I155514.RAW

Line ? Error/Warning

Original Text

Input Set: I155514.RAW

PREVIOUSLY ERRORED SEQUENCES-EDITED

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14 Gly Pro Glu Ala Ala Leu Arg Glu Thr Val Met Leu Leu Leu Cys Leu
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18 -5 1 5
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20 Leu Tyr Gln Gly Pro His Asn Thr Leu Phe Gly Tyr Ser Val Val Leu
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28 tgc acg atc gga aag aat ccc ggc cag acg tgc gaa cag ctc cag ctg 336
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33 75 80 85
34 gac aat cag tgg ttg ggg gtc aca ctt tcc aga cag cca gga gaa aat 432
35 Asp Asn Gln Trp Leu Gly Val Thr Leu Ser Arg Gln Pro Gly Glu Asn
36 90 95 100 105
37 gga tcc atc gtg act tgt ggg cat aga tgg aaa aat ata ttt tac ata 480
38 Gly Ser Ile Val Thr Cys Gly His Arg Trp Lys Asn Ile Phe Tyr Ile
39 110 115 120
40 aag aat gaa aat aag ctc ccc act ggt ggt tgc tat gga gtg ccc cct 528
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42 125 130 135
43 gat tta cga aca gaa ctg agt aaa aga ata gct ccg tgt tat caa gat 576
44 Asp Leu Arg Thr Glu Leu Ser Lys Arg Ile Ala Pro Cys Tyr Gln Asp
45 140 145 150
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RAW SEQUENCE LISTING PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:21:00

Input Set: I155514.RAW

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64	ata ttc agc att gat gaa aaa gaa cta aat atc tta cat gaa atg aaa	912			
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71	Leu Asn Ala Asp Gly Phe Ser Asp Leu Leu Val Gly Ala Pro Met Gln				
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74	Ser Thr Ile Arg Glu Glu Gly Arg Val Phe Val Tyr Ile Asn Ser Gly				
75	300 305 310				
76	tcg gga gca gta atg aat gca atg gaa aca aac ctc gtt gga agt gac	1104			
77	Ser Gly Ala Val Met Asn Ala Met Glu Thr Asn Leu Val Gly Ser Asp				
78	315 320 325				
79	aaa tat gct gca aga ttt ggg gaa tct ata gtt aat ctt ggc gac att	1152			
80	Lys Tyr Ala Ala Arg Phe Gly Glu Ser Ile Val Asn Leu Gly Asp Ile				
81	330 335 340 345				
82	gac aat gat ggc ttt gaa gat gtt gct atc gga gct cca caa gaa gat	1200			
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98	Val Leu Leu Arg Thr Arg Pro Val Val Ile Val Asp Ala Ser Leu Ser				
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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

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104	Trp Pro Ser Val Cys Ile Asp Leu Thr Leu Cys Phe Ser Tyr Lys Gly	
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106	aag gaa gtt cca ggt tac att gtt ttg ttt tat aac atg agt ttg gat	1584
107	Lys Glu Val Pro Gly Tyr Ile Val Leu Phe Tyr Asn Met Ser Leu Asp	
108	475 480 485	
109	gtg aac aga aag gca gag tct cca cca aga ttc tat ttc tct tct aat	1632
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116	Ala Asn Cys Arg Thr His Gln Ala Phe Met Arg Lys Asp Val Arg Asp	
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122	Val Ile Ser Lys Arg Ser Thr Glu Glu Phe Pro Pro Leu Gln Pro Ile	
123	555 560 565	
124	ctt cag cag aag aaa gaa aaa gac ata atg aaa aaa aca ata aac ttt	1872
125	Leu Gln Gln Lys Lys Glu Lys Asp Ile Met Lys Lys Thr Ile Asn Phe	
126	570 575 580 585	
127	gca agg ttt tgt gcc cat gaa aat tgt tct gct gat tta cag gtt tct	1920
128	Ala Arg Phe Cys Ala His Glu Asn Cys Ser Ala Asp Leu Gln Val Ser	
129	590 595 600	
130	gca aag att ggg ttt ttg aag ccc cat gaa aat aaa aca tat ctt gct	1968
131	Ala Lys Ile Gly Phe Leu Lys Pro His Glu Asn Lys Thr Tyr Leu Ala	
132	605 610 615	
133	gtt ggg agt atg aag aca ttg atg ttg aat gtg tcc ttg ttt aat gct	2016
134	Val Gly Ser Met Lys Thr Leu Met Leu Asn Val Ser Leu Phe Asn Ala	
135	620 625 630	
136	gga gat gat gca tat gaa acg act cta cat gtc aaa cta ccc gtg ggt	2064
137	Gly Asp Asp Ala Tyr Glu Thr Thr Leu His Val Lys Leu Pro Val Gly	
138	635 640 645	
139	ctt tat ttc att aag att tta gag ctg gaa gag aag caa ata aac tgt	2112
140	Leu Tyr Phe Ile Lys Ile Leu Glu Leu Glu Glu Lys Gln Ile Asn Cys	
141	650 655 660 665	
142	gaa gtc aca gat aac tct ggc gtg gta caa ctt gac tgc agt att ggc	2160
143	Glu Val Thr Asp Asn Ser Gly Val Val Gln Leu Asp Cys Ser Ile Gly	
144	670 675 680	
145	tat ata tat gta gat cat ctc tca agg ata gat att agc ttt ctc ctg	2208
146	Tyr Ile Tyr Val Asp His Leu Ser Arg Ile Asp Ile Ser Phe Leu Leu	
147	685 690 695	
148	gat gtg agc tca ctc agc aga gcg gaa gag gac ctc agt atc aca gtg	2256
149	Asp Val Ser Ser Leu Ser Arg Ala Glu Glu Asp Leu Ser Ile Thr Val	
150	700 705 710	

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151	cat gct acc tgt gaa aat gaa gag gaa atg gac aat cta aag cac agc	2304
152	His Ala Thr Cys Glu Asn Glu Glu Glu Met Asp Asn Leu Lys His Ser	
153	715 720 725	
154	aga gtg act gta gca ata cct tta aaa tat gag gtt aag ctg act gtt	2352
155	Arg Val Thr Val Ala Ile Pro Leu Lys Tyr Glu Val Lys Leu Thr Val	
156	730 735 740 745	
157	cat ggg ttt gta aac cca act tca ttt gtg tat gga tca aat gat gaa	2400
158	His Gly Phe Val Asn Pro Thr Ser Phe Val Tyr Gly Ser Asn Asp Glu	
159	750 755 760	
160	aat gag cct gaa acg tgc atg gtg gag aaa atg aac tta act ttc cat	2448
161	Asn Glu Pro Glu Thr Cys Met Val Glu Lys Met Asn Leu Thr Phe His	
162	765 770 775	
163	gtt atc aac act ggc aat agt atg gct ccc aat gtt agt gtg gaa ata	2496
164	Val Ile Asn Thr Gly Asn Ser Met Ala Pro Asn Val Ser Val Glu Ile	
165	780 785 790	
166	atg gta cca aat tct ttt agc ccc caa act gat aag ctg ttc aac att	2544
167	Met Val Pro Asn Ser Phe Ser Pro Gln Thr Asp Lys Leu Phe Asn Ile	
168	795 800 805	
169	ttg gat gtc cag act act act gga gaa tgc cac ttt gaa aat tat caa	2592
170	Leu Asp Val Gln Thr Thr Thr Gly Glu Cys His Phe Glu Asn Tyr Gln	
171	810 815 820 825	
172	aga gtg tgt gca tta gag cag caa aag agt gca atg cag acc ttg aaa	2640
173	Arg Val Cys Ala Leu Glu Gln Gln Lys Ser Ala Met Gln Thr Leu Lys	
174	830 835 840	
175	ggc ata gtc cgg ttc ttg tcc aag act gat aag agg cta ttg tac tgc	2688
176	Gly Ile Val Arg Phe Leu Ser Lys Thr Asp Lys Arg Leu Leu Tyr Cys	
177	845 850 855	
178	ata aaa gct gat cca cat tgt tta aat ttc ttg tgt aat ttt ggg aaa	2736
179	Ile Lys Ala Asp Pro His Cys Leu Asn Phe Leu Cys Asn Phe Gly Lys	
180	860 865 870	
181	atg gaa agt gga aaa gaa gcc agt gtt cat atc caa ctg gaa ggc cgg	2784
182	Met Glu Ser Gly Lys Glu Ala Ser Val His Ile Gln Leu Glu Gly Arg	
183	875 880 885	
184	cca tcc att tta gaa atg gat gag act tca gca ctc aag ttt gaa ata	2832
185	Pro Ser Ile Leu Glu Met Asp Glu Thr Ser Ala Leu Lys Phe Glu Ile	
186	890 895 900 905	
187	aga gca aca ggt ttt cca gag cca aat cca aga gta att gaa cta aac	2880
188	Arg Ala Thr Gly Phe Pro Glu Pro Asn Pro Arg Val Ile Glu Leu Asn	
189	910 915 920	
190	aag gat gag aat gtt gcg cat gtt cta ctg gaa gga cta cat cat caa	2928
191	Lys Asp Glu Asn Val Ala His Val Leu Leu Glu Gly Leu His His Gln	
192	925 930 935	
193	aga ccc aaa cgt tat ttc acg gat ccc gag ctgctggaag caggctcagc	2978
194	Arg Pro Lys Arg Tyr Phe Thr Asp Pro Glu	
195	940 945	
196	gctcctgect ggacgcatcc eggctatgca gccccagtcc agggcagcaa ggcaggcccc	3038
197	gtctgectct tcacccggag cctctgcccg ccccaactcat gctcaggagg aggggtcttct	3098
198	ggctttttcc caggctctgg gcaggcacag gctaggtgcc cctaaccacag gccctgcaca	3158
199	caaaggggca ggtgctgggc tcagacctgc caagagccat atccggggagg accctgcccc	3218
200	tgacctaaagc ccaccccaaa ggccaaactc tccactccct cagctcggac accttctctc	3278

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204      aaa act cac aca tgc cca ccg tgc cca ggtaagccag cccaggcctc 3380
205      Lys Thr His Thr Cys Pro Pro Cys Pro
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207      gccctccagc tcaaggcggg acaggtgccc tagagtagcc tgcattccagg gacaggcccc 3440
208      agccgggtgc tgacacgtcc acctccatct ctctctca gca cct gaa ctc ctg 3493
209                                     Ala Pro Glu Leu Leu
210                                     965
211      ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa ccc aag gac acc ctc 3541
212      Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
213      970                               975                               980
214      atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gac gtg agc 3589
215      Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
216      985                               990                               995
217      cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag 3637
218      His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
219      1000                               1005                               1010                               1015
220      gtg cat aat gcc aag aca aag ccg cgg gag gag cag tac aac agc acg 3685
221      Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
222      1020                               1025                               1030
223      tac cgg gtg gtc agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat 3733
224      Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
225      1035                               1040                               1045
226      ggc aag gag tac aag tgc aag gtc tcc aac aaa gcc ctc cca gcc ccc 3781
227      Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
228      1050                               1055                               1060
229      atc gag aaa acc atc tcc aaa gcc aaa ggtgggaccc gtgggggtgcg 3828
230      Ile Glu Lys Thr Ile Ser Lys Ala Lys
231      1065                               1070
232      agggccacat ggacagaggc cggctcggcc caccctctgc cctgagagtg accgctgtac 3888
233      caacctctgt cctaca ggg cag ccc cga gaa cca cag gtg tac acc ctg 3937
234      Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
235      1075                               1080
236      ccc cca tcc cgg gat gag ctg acc aag aac cag gtc agc ctg acc tgc 3985
237      Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys
238      1085                               1090                               1095
239      ctg gtc aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag agc 4033
240      Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
241      1100                               1105                               1110                               1115
242      aat ggg cag ccg gag aac aac tac aag acc acg cct ccc gtg ctg gat 4081
243      Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
244      1120                               1125                               1130
245      tcc gac ggc tcc ttc ttc ctc tac agc aag ctc acc gtg gac aag agc 4129
246      Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
247      1135                               1140                               1145
248      agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag gct 4177
249      Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
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253	1165 1170 1175	
254	tga	4228

255	<210> 19	
256	<211> 4675	
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258	<213> Homo sapien	
259	<220>	
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261	<222> 1...3405, 3763...3807, 3926...4255, 4352...4675	
262	<300>	
263	<400> 19	
264	atg ggg cca gaa cgg aca ggg gcc gcg ccg ctg ccg ctg ctg ctg gtg	48
265	Met Gly Pro Glu Arg Thr Gly Ala Ala Pro Leu Pro Leu Leu Leu Val	
266	-25 -20 -15	
267	tta gcg ctc agt caa ggc att tta aat tgt tgt ttg gcc tac aat gtt	96
268	Leu Ala Leu Ser Gln Gly Ile Leu Asn Cys Cys Leu Ala Tyr Asn Val	
269	-10 -5 1	
270	ggt ctc cca gaa gca aaa ata ttt tcc ggt cct tca agt gaa cag ttt	144
271	Gly Leu Pro Glu Ala Lys Ile Phe Ser Gly Pro Ser Ser Glu Gln Phe	
272	5 10 15	
273	ggg tat gca gtg cag cag ttt ata aat cca aaa ggc aac tgg tta ctg	192
274	Gly Tyr Ala Val Gln Gln Phe Ile Asn Pro Lys Gly Asn Trp Leu Leu	
275	20 25 30 35	
276	gtt ggt tca ccc tgg agt ggc ttt cct gag aac cga atg gga gat gtg	240
277	Val Gly Ser Pro Trp Ser Gly Phe Pro Glu Asn Arg Met Gly Asp Val	
278	40 45 50	
279	tat aaa tgt cct gtt gac cta tcc act gcc aca tgt gaa aaa cta aat	288
280	Tyr Lys Cys Pro Val Asp Leu Ser Thr Ala Thr Cys Glu Lys Leu Asn	
281	55 60 65	
282	ttg caa act tca aca agc att cca aat gtt act gag atg aaa acc aac	336
283	Leu Gln Thr Ser Thr Ser Ile Pro Asn Val Thr Glu Met Lys Thr Asn	
284	70 75 80	
285	atg agc ctc ggc ttg atc ctc acc agg aac atg gga act gga ggt ttt	384
286	Met Ser Leu Gly Leu Ile Leu Thr Arg Asn Met Gly Thr Gly Gly Phe	
287	85 90 95	
288	ctc aca tgt ggt cct ctg tgg gca cag caa tgt ggg aat cag tat tac	432
289	Leu Thr Cys Gly Pro Leu Trp Ala Gln Gln Cys Gly Asn Gln Tyr Tyr	
290	100 105 110 115	
291	aca acg ggt gtg tgt tct gac atc agt cct gat ttt cag ctc tca gcc	480
292	Thr Thr Gly Val Cys Ser Asp Ile Ser Pro Asp Phe Gln Leu Ser Ala	
293	120 125 130	
294	agc ttc tca cct gca act cag ccc tgc cct tcc ctc ata gat gtt gtg	528
295	Ser Phe Ser Pro Ala Thr Gln Pro Cys Pro Ser Leu Ile Asp Val Val	
296	135 140 145	
297	gtt gtg tgt gat gaa tca aat agt att tat cct tgg gat gca gta aag	576
298	Val Val Cys Asp Glu Ser Asn Ser Ile Tyr Pro Trp Asp Ala Val Lys	
299	150 155 160	
300	aat ttt ttg gaa aaa ttt gta caa ggc ctt gat ata ggc ccc aca aag	624

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301	Asn Phe Leu Glu Lys Phe Val Gln Gly Leu Asp Ile Gly Pro Thr Lys	
302	165 170 175	
303	aca cag gtg ggg tta att cag tat gcc aat aat cca aga gtt gtg ttt	672
304	Thr Gln Val Gly Leu Ile Gln Tyr Ala Asn Asn Pro Arg Val Val Phe	
305	180 185 190 195	
306	aac ttg aac aca tat aaa acc aaa gaa gaa atg att gta gca aca tcc	720
307	Asn Leu Asn Thr Tyr Lys Thr Lys Glu Glu Met Ile Val Ala Thr Ser	
308	200 205 210	
309	cag aca tcc caa tat ggt ggg gac ctc aca aac aca ttc gga gca att	768
310	Gln Thr Ser Gln Tyr Gly Gly Asp Leu Thr Asn Thr Phe Gly Ala Ile	
311	215 220 225	
312	caa tat gca aga aaa tat gcc tat tca gca gct tct ggt ggg cga cga	816
313	Gln Tyr Ala Arg Lys Tyr Ala Tyr Ser Ala Ala Ser Gly Gly Arg Arg	
314	230 235 240	
315	agt gct acg aaa gta atg gta gtt gta act gac ggt gaa tca cat gat	864
316	Ser Ala Thr Lys Val Met Val Val Val Thr Asp Gly Glu Ser His Asp	
317	245 250 255	
318	ggg tca atg ttg aaa gct gtg att gat caa tgc aac cat gac aat ata	912
319	Gly Ser Met Leu Lys Ala Val Ile Asp Gln Cys Asn His Asp Asn Ile	
320	260 265 270 275	
321	ctg agg ttt ggc ata gca gtt ctt ggg tac tta aac aga aac gcc ctt	960
322	Leu Arg Phe Gly Ile Ala Val Leu Gly Tyr Leu Asn Arg Asn Ala Leu	
323	280 285 290	
324	gat act aaa aat tta ata aaa gaa ata aaa gcg atc gct agt att cca	1008
325	Asp Thr Lys Asn Leu Ile Lys Glu Ile Lys Ala Ile Ala Ser Ile Pro	
326	295 300 305	
327	aca gaa aga tac ttt ttc aat gtg tct gat gaa gca gct cta cta gaa	1056
328	Thr Glu Arg Tyr Phe Phe Asn Val Ser Asp Glu Ala Ala Leu Leu Glu	
329	310 315 320	
330	aag gct ggg aca tta gga gaa caa att ttc agc att gaa ggt act gtt	1104
331	Lys Ala Gly Thr Leu Gly Glu Gln Ile Phe Ser Ile Glu Gly Thr Val	
332	325 330 335	
333	caa gga gga gac aac ttt cag atg gaa atg tca caa gtg gga ttc agt	1152
334	Gln Gly Gly Asp Asn Phe Gln Met Glu Met Ser Gln Val Gly Phe Ser	
335	340 345 350 355	
336	gca gat tac tct tct caa aat gat att ctg atg ctg ggt gca gtg gga	1200
337	Ala Asp Tyr Ser Ser Gln Asn Asp Ile Leu Met Leu Gly Ala Val Gly	
338	360 365 370	
339	gct ttt ggc tgg agt ggg acc att gtc cag aag aca tct cat ggc cat	1248
340	Ala Phe Gly Trp Ser Gly Thr Ile Val Gln Lys Thr Ser His Gly His	
341	375 380 385	
342	ttg atc ttt cct aaa caa gcc ttt gac caa att ctg cag gac aga aat	1296
343	Leu Ile Phe Pro Lys Gln Ala Phe Asp Gln Ile Leu Gln Asp Arg Asn	
344	390 395 400	
345	cac agt tca tat tta ggt tac tct gtg gct gca att tct act gga gaa	1344
346	His Ser Ser Tyr Leu Gly Tyr Ser Val Ala Ala Ile Ser Thr Gly Glu	
347	405 410 415	
348	agc act cac ttt gtt gct ggt gct cct cgg gca aat tat acc ggc cag	1392
349	Ser Thr His Phe Val Ala Gly Ala Pro Arg Ala Asn Tyr Thr Gly Gln	
350	420 425 430 435	

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352	Ile Val Leu Tyr Ser Val Asn Glu Asn Gly Asn Ile Thr Val Ile Gln	
353	440 445 450	
354	gct cac cga ggt gac cag att ggc tcc tat ttt ggt agt gtg ctg tgt	1488
355	Ala His Arg Gly Asp Gln Ile Gly Ser Tyr Phe Gly Ser Val Leu Cys	
356	455 460 465	
357	tca gtt gat gtg gat aaa gac acc att aca gac gtg ctc ttg gta ggt	1536
358	Ser Val Asp Val Asp Lys Asp Thr Ile Thr Asp Val Leu Leu Val Gly	
359	470 475 480	
360	gca cca atg tac atg agt gac cta aag aaa gag gaa gga aga gtc tac	1584
361	Ala Pro Met Tyr Met Ser Asp Leu Lys Lys Glu Glu Gly Arg Val Tyr	
362	485 490 495	
363	ctg ttt act atc aaa aag ggc att ttg ggt cag cac caa ttt ctt gaa	1632
364	Leu Phe Thr Ile Lys Lys Gly Ile Leu Gly Gln His Gln Phe Leu Glu	
365	500 505 510 515	
366	ggc ccc gag ggc att gaa aac act cga ttt ggt tca gca att gca gct	1680
367	Gly Pro Glu Gly Ile Glu Asn Thr Arg Phe Gly Ser Ala Ile Ala Ala	
368	520 525 530	
369	ctt tca gac atc aac atg gat ggc ttt aat gat gtg att gtt ggt tca	1728
370	Leu Ser Asp Ile Asn Met Asp Gly Phe Asn Asp Val Ile Val Gly Ser	
371	535 540 545	
372	cca cta gaa aat cag aat tct gga gct gta tac att tac aat ggt cat	1776
373	Pro Leu Glu Asn Gln Asn Ser Gly Ala Val Tyr Ile Tyr Asn Gly His	
374	550 555 560	
375	cag ggc act atc cgc aca aag tat tcc cag aaa atc ttg gga tcc gat	1824
376	Gln Gly Thr Ile Arg Thr Lys Tyr Ser Gln Lys Ile Leu Gly Ser Asp	
377	565 570 575	
378	gga gcc ttt agg agc cat ctc cag tac ttt ggg agg tcc ttg gat ggc	1872
379	Gly Ala Phe Arg Ser His Leu Gln Tyr Phe Gly Arg Ser Leu Asp Gly	
380	580 585 590 595	
381	tat gga gat tta aat ggg gat tcc atc acc gat gtg tct att ggt gcc	1920
382	Tyr Gly Asp Leu Asn Gly Asp Ser Ile Thr Asp Val Ser Ile Gly Ala	
383	600 605 610	
384	ttt gga caa gtg gtt caa ctc tgg tca caa agt att gct gat gta gct	1968
385	Phe Gly Gln Val Val Gln Leu Trp Ser Gln Ser Ile Ala Asp Val Ala	
386	615 620 625	
387	ata gaa gct tca ttc aca cca gaa aaa atc act ttg gtc aac aag aat	2016
388	Ile Glu Ala Ser Phe Thr Pro Glu Lys Ile Thr Leu Val Asn Lys Asn	
389	630 635 640	
390	gct cag ata att ctc aaa ctc tgc ttc agt gca aag ttc aga cct act	2064
391	Ala Gln Ile Ile Leu Lys Leu Cys Phe Ser Ala Lys Phe Arg Pro Thr	
392	645 650 655	
393	aag caa aac aat caa gtg gcc att gta tat aac atc aca ctt gat gca	2112
394	Lys Gln Asn Asn Gln Val Ala Ile Val Tyr Asn Ile Thr Leu Asp Ala	
395	660 665 670 675	
396	gat gga ttt tca tcc aga gta acc tcc agg ggg tta ttt aaa gaa aac	2160
397	Asp Gly Phe Ser Ser Arg Val Thr Ser Arg Gly Leu Phe Lys Glu Asn	
398	680 685 690	
399	aat gaa agg tgc ctg cag aag aat atg gta gta aat caa gca cag agt	2208
400	Asn Glu Arg Cys Leu Gln Lys Asn Met Val Val Asn Gln Ala Gln Ser	

401					695					700					705			
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403	Cys	Pro	Glu	His	Ile	Ile	Tyr	Ile	Gln	Glu	Pro	Ser	Asp	Val	Val	Asn		
404			710					715					720					
405	tct	ttg	gat	ttg	cgt	gtg	gac	atc	agt	ctg	gaa	aac	cct	ggc	act	agc	2304	
406	Ser	Leu	Asp	Leu	Arg	Val	Asp	Ile	Ser	Leu	Glu	Asn	Pro	Gly	Thr	Ser		
407		725					730					735						
408	cct	gcc	ctt	gaa	gcc	tat	tct	gag	act	gcc	aag	gtc	ttc	agt	att	cct	2352	
409	Pro	Ala	Leu	Glu	Ala	Tyr	Ser	Glu	Thr	Ala	Lys	Val	Phe	Ser	Ile	Pro		
410	740					745					750					755		
411	ttc	cac	aaa	gac	tgt	ggg	gag	gat	gga	ctt	tgc	att	tct	gat	cta	gtc	2400	
412	Phe	His	Lys	Asp	Cys	Gly	Glu	Asp	Gly	Leu	Cys	Ile	Ser	Asp	Leu	Val		
413				760					765						770			
414	cta	gat	gtc	cga	caa	ata	cca	gct	gct	caa	gaa	caa	ccc	ttt	att	gtc	2448	
415	Leu	Asp	Val	Arg	Gln	Ile	Pro	Ala	Ala	Gln	Glu	Gln	Pro	Phe	Ile	Val		
416			775					780					785					
417	agc	aac	caa	aac	aaa	agg	tta	aca	ttt	tca	gta	aca	ctg	aaa	aat	aaa	2496	
418	Ser	Asn	Gln	Asn	Lys	Arg	Leu	Thr	Phe	Ser	Val	Thr	Leu	Lys	Asn	Lys		
419		790					795					800						
420	agg	gaa	agt	gca	tac	aac	act	gga	att	gtt	gtt	gat	ttt	tca	gaa	aac	2544	
421	Arg	Glu	Ser	Ala	Tyr	Asn	Thr	Gly	Ile	Val	Val	Asp	Phe	Ser	Glu	Asn		
422		805				810						815						
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424	Leu	Phe	Phe	Ala	Ser	Phe	Ser	Leu	Pro	Val	Asp	Gly	Thr	Glu	Val	Thr		
425	820					825					830					835		
426	tgc	cag	gtg	gct	gca	tct	cag	aag	tct	gtt	gcc	tgc	gat	gta	ggc	tac	2640	
427	Cys	Gln	Val	Ala	Ala	Ser	Gln	Lys	Ser	Val	Ala	Cys	Asp	Val	Gly	Tyr		
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429	cct	gct	tta	aag	aga	gaa	caa	cag	gtg	act	ttt	act	att	aac	ttt	gac	2688	
430	Pro	Ala	Leu	Lys	Arg	Glu	Gln	Gln	Val	Thr	Phe	Thr	Ile	Asn	Phe	Asp		
431			855					860						865				
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434			870					875					880					
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DATE: 02/03/2000
TIME: 13:21:00

Input Set: I155514.RAW

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452	965 970 975	
453	gtg caa aca gac aag gct ggt gac atc agt tgt aat gca gat atc aat	3072
454	Val Gln Thr Asp Lys Ala Gly Asp Ile Ser Cys Asn Ala Asp Ile Asn	
455	980 985 990 995	
456	cca ctg aaa ata gga caa aca tct tct tct gta tct ttc aaa agt gaa	3120
457	Pro Leu Lys Ile Gly Gln Thr Ser Ser Ser Val Ser Phe Lys Ser Glu	
458	1000 1005 1010	
459	aat ttc agg cac acc aaa gaa ttg aac tgc aga act gct tcc tgt agt	3168
460	Asn Phe Arg His Thr Lys Glu Leu Asn Cys Arg Thr Ala Ser Cys Ser	
461	1015 1020 1025	
462	aat gtt acc tgc tgg ttg aaa gac gtt cac atg aaa gga gaa tac ttt	3216
463	Asn Val Thr Cys Trp Leu Lys Asp Val His Met Lys Gly Glu Tyr Phe	
464	1030 1035 1040	
465	gtt aat gtg act acc aga att tgg aac ggg act ttc gca tca tca acg	3264
466	Val Asn Val Thr Thr Arg Ile Trp Asn Gly Thr Phe Ala Ser Ser Thr	
467	1045 1050 1055	
468	ttc cag aca gta cag cta acg gca gct gca gaa atc aac acc tat aac	3312
469	Phe Gln Thr Val Gln Leu Thr Ala Ala Ala Glu Ile Asn Thr Tyr Asn	
470	1060 1065 1070 1075	
471	cct gag ata tat gtg att gaa gat aac act gtt acg att ccc ctg atg	3360
472	Pro Glu Ile Tyr Val Ile Glu Asp Asn Thr Val Thr Ile Pro Leu Met	
473	1080 1085 1090	
474	ata atg aaa cct gat gag aaa gcc gaa gta cca aca gat ccc gag	3405
475	Ile Met Lys Pro Asp Glu Lys Ala Glu Val Pro Thr Asp Pro Glu	
476	1095 1100 1105	
477	ctgctggaag caggctcagc gctcctgcct ggacgcaccc cggctatgca gccccagttcc	3465
478	agggcagcaa ggcaggcccc gtctgcctct tcacccggag cctctgcccc cccactcat	3525
479	gctcagggag agggctcttct ggctttttcc caggctctgg gcaggcacag gctaggtgcc	3585
480	cctaaccag gccctgcaca caaaggggca ggtgctgggc tcagacctgc caagagccat	3645
481	atccgggagg accctgcccc tgacctaaagc ccaccccaaa ggccaaaactc tccactccct	3705
482	cagctcggac accttctctc ctcccagatt ccagtaactc ccaatcttct ctctgca	3762
483	gag ccc aaa tct tgt gac aaa act cac aca tgc cca ccg tgc cca	3807
484	Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro	
485	1110 1115 1120	
486	ggtaagccag cccaggcctc gccctccagc tcaaggcggg acagggtgcc tagagtagcc	3867
487	tgcacccagg gacaggcccc agccgggtgc tgacacgtcc acctccatct ctctctca	3925
488	gca cct gaa ctc ctg ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa	3973
489	Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys	
490	1125 1130 1135	
491	ccc aag gac acc ctc atg atc tcc cgg acc cct gag gtc aca tgc gtg	4021
492	Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val	
493	1140 1145 1150	
494	gtg gtg gac gtg agc cac gaa gac cct gag gtc aag ttc aac tgg tac	4069
495	Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr	
496	1155 1160 1165	
497	gtg gac ggc gtg gag gtg cat aat gcc aag aca aag ccg cgg gag gag	4117
498	Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu	
499	1170 1175 1180 1185	
500	cag tac aac agc acg tac cgg gtg gtc agc gtc ctc acc gtc ctg cac	4165

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:21:00

Input Set: I155514.RAW

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503      cag gac tgg ctg aat ggc aag gag tac aag tgc aag gtc tcc aac aaa      4213
504      Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
505                      1205                      1210                      1215
506      gcc ctg cca gcc ccc atc gag aaa acc atc tcc aaa gcc aaa      4255
507      Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
508                      1220                      1225                      1230
509      ggtgggaccc gtggggtgcg agggccacat ggacagaggc cggctcggcc caccctctgc 4315
510      cctgagagtg accgctgtac caacctctgt cctaca ggg cag ccc cga gaa cca      4369
511                      Gly Gln Pro Arg Glu Pro
512                      1235
513      cag gtg tac acc ctg ccc cca tcc cgg gat gag ctg acc aag aac cag      4417
514      Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
515                      1240                      1245                      1250
516      gtc agc ctg acc tgc ctg gtc aaa ggc ttc tat ccc agc gac atc gcc      4465
517      Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
518                      1255                      1260                      1265
519      gtg gag tgg gag agc aat ggg cag ccg gag aac aac tac aag acc acg      4513
520      Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
521      1270                      1275                      1280                      1285
522      cct ccc gtg ctg gat tcc gac ggc tcc ttc ttc ctg tac agc aag ctg      4561
523      Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
524                      1290                      1295                      1300
525      acc gtg gac aag agc agg tgg cag cag ggg aac gtc ttc tca tgc tcc      4609
526      Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
527                      1305                      1310                      1315
528      gtg atg cat gag gct ctg cac aac cac tac acg cag aag agc ctg tcc      4657
529      Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
530                      1320                      1325                      1330
531      ctg tct ccg ggt aaa tga      4675
532      Leu Ser Pro Gly Lys
533                      1335

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RAW SEQUENCE LISTING
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DATE: 02/03/2000
TIME: 13:10:50

Input Set: I155514.RAW

This Raw Listing contains the General
Information Section and those Sequences
containing ERRORS.

Does Not Comply
Corrected Diskette Needed

1 <110> Kainoh, Mie
2 Tanaka, Toshiaki
3 <120> Chimeric proteins, their heterodimer complexes, and platelet
4 substitutes
5 <130> 1102-98
6 <141> 1998-11-17
7 <150> PCT/JP98/00370
8 <151> 1997-01-29
9 <150> JP 9-15118
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12 <151> 1997-08-29
13 <160> 31
14 <170> Wordperfect 8.0

ERRORED SEQUENCES FOLLOW

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16 <211> 4228
17 <212> DNA
18 <213> Homo sapien
19 <220>
20 <221> CDS
21 <222> 1...2958, 3316...3360, 3480...3808, 3905...4228
22 <300>
23 <400> 1
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25 Met Phe Pro Thr Glu Ser Ala Trp Leu Gly Lys Arg Gly Ala Asn Pro
26 -35 -30 -25
27 ggc ccc gaa gct gca ctc cgg gag acg gtg atg ctg ttg ctg tgc ctg 96
28 Gly Pro Glu Ala Ala Leu Arg Glu Thr Val Met Leu Leu Cys Leu
29 -20 -15 -10
30 ggg gtc ccg acc ggc agg cct tac aac gtg gac act gag agc gcg ctg 144
31 Gly Val Pro Thr Gly Arg Pro Tyr Asn Val Asp Thr Glu Ser Ala Leu
32 -5 1 5
33 ctt tac cag ggc ccc cac aac acg ctg ttc ggc tac tcg gtc gtg ctg 192
34 Leu Tyr Gln Gly Pro His Asn Thr Leu Phe Gly Tyr Ser Val Val Leu
35 10 15 20 25
36 cac agc cac ggg gcg aac cga tgg ctc cta gtg ggt gcg ccc act gcc 240
37 His Ser His Gly Ala Asn Arg Trp Leu Leu Val Gly Ala Pro Thr Ala
38 30 35 40
39 aac tgg ctc gcc aac gct tca gtg atc aat ccc ggg gcg att tac aga 288

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:10:50

Input Set: I155514.RAW

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41	45 50 55	
42	tgc acg atc gga aag aat ccc ggc cag acg tgc gaa cag ctc cag ctg	336
43	Cys Arg Ile Gly Lys Asn Pro Gly Gln Thr Cys Glu Gln Leu Gln Leu	
44	60 65 70	
45	ggg agc cct aat gga gaa cct tgt gga aag act tgt ttg gaa gag aga	384
46	Gly Ser Pro Asn Gly Glu Pro Cys Gly Lys Thr Cys Leu Glu Glu Arg	
47	75 80 85	
48	gac aat cag tgg ttg ggg gtc aca ctt tcc aga cag cca gga gaa aat	432
49	Asp Asn Gln Trp Leu Gly Val Thr Leu Ser Arg Gln Pro Gly Glu Asn	
50	90 95 100 105	
51	gga tcc atc gtg act tgt ggg cat aga tgg aaa aat ata ttt tac ata	480
52	Gly Ser Ile Val Thr Cys Gly His Arg Trp Lys Asn Ile Phe Tyr Ile	
53	110 115 120	
54	aag aat gaa aat aag ctc ccc act ggt ggt tgc tat gga gtg ccc cct	528
55	Lys Asn Glu Asn Lys Leu Pro Thr Gly Gly Cys Tyr Gly Val Pro Pro	
56	125 130 135	
57	gat tta cga aca gaa ctg agt aaa aga ata gct ccg tgt tat caa gat	576
58	Asp Leu Arg Thr Glu Leu Ser Lys Arg Ile Ala Pro Cys Tyr Gln Asp	
59	140 145 150	
60	tat gtg aaa aaa ttt gga gaa aat ttt gca tca tgt caa gct gga ata	624
61	Tyr Val Lys Lys Phe Gly Glu Asn Phe Ala Ser Cys Gln Ala Gly Ile	
62	155 160 165	
63	tcc agt ttt tac aca aag gat tta att gtg atg ggg gcc cca gga tca	672
64	Ser Ser Phe Tyr Thr Lys Asp Leu Ile Val Met Gly Ala Pro Gly Ser	
65	170 175 180 185	
66	tct tac tgg act ggc tct ctt ttt gtc tac aat ata act aca aat aaa	720
67	Ser Tyr Trp Thr Gly Ser Leu Phe Val Tyr Asn Ile Thr Thr Asn Lys	
68	190 195 200	
69	tac aag gct ttt tta gac aaa caa aat caa gta aaa ttt gga agt tat	768
70	Tyr Lys Ala Phe Leu Asp Lys Gln Asn Gln Val Lys Phe Gly Ser Tyr	
71	205 210 215	
72	tta gga tat tca gtc gga gct ggt cat ttt cgg agc cag cat act acc	816
73	Leu Gly Tyr Ser Val Gly Ala Gly His Phe Arg Ser Gln His Thr Thr	
74	220 225 230	
75	gaa gta gtc gga gga gct cct caa cat gag cag att ggt aag gca tat	864
76	Glu Val Val Gly Gly Ala Pro Gln His Glu Gln Ile Gly Lys Ala Tyr	
77	235 240 245	
78	ata ttc agc att gat gaa aaa gaa cta aat atc tta cat gaa atg aaa	912
79	Ile Phe Ser Ile Asp Glu Lys Glu Leu Asn Ile Leu His Glu Met Lys	
80	250 255 260 265	
81	ggg aaa aag ctt gga tcg tac ttt gga gct tct gtc tgt gct gtg gac	960
82	Gly Lys Lys Leu Gly Ser Tyr Phe Gly Ala Ser Val Cys Ala Val Asp	
83	270 275 280	
84	ctc aat gca gat ggc ttc tca gat ctg ctc gtg gga gca ccc atg cag	1008
85	Leu Asn Ala Asp Gly Phe Ser Asp Leu Leu Val Gly Ala Pro Met Gln	
86	285 290 295	
87	agc acc atc aga gag gaa gga aga gtg ttt gtg tac atc aac tct ggc	1056
88	Ser Thr Ile Arg Glu Glu Gly Arg Val Phe Val Tyr Ile Asn Ser Gly	
89	300 305 310	

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RAW SEQUENCE LISTING
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DATE: 02/03/2000
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Input Set: I155514.RAW

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92	315 320 325	
93	aaa tat gct gca aga ttt ggg gaa tct ata gtt aat ctt ggc gac att	1152
94	Lys Tyr Ala Ala Arg Phe Gly Glu Ser Ile Val Asn Leu Gly Asp Ile	
95	330 335 340 345	
96	gac aat gat ggc ttt gaa gat gtt gct atc gga gct cca caa gaa gat	1200
97	Asp Asn Asp Gly Phe Glu Asp Val Ala Ile Gly Ala Pro Gln Glu Asp	
98	350 355 360	
99	gac ttg caa ggt gct att tat att tac aat ggc cgt gca gat ggg atc	1248
100	Asp Leu Gln Gly Ala Ile Tyr Ile Tyr Asn Gly Arg Ala Asp Gly Ile	
101	365 370 375	
102	tcg tca acc ttc tca cag aga att gaa gga ctt cag atc agc aaa tcg	1296
103	Ser Ser Thr Phe Ser Gln Arg Ile Glu Gly Leu Gln Ile Ser Lys Ser	
104	380 385 390	
105	tta agt atg ttt gga cag tct ata tca gga caa att gat gca gat att	1344
106	Leu Ser Met Phe Gly Gln Ser Ile Ser Gly Gln Ile Asp Ala Asp Asn	
107	395 400 405	
108	aat ggc tat gta gat gta gca ggt cgt gct ttt cgg tct gat tct gct	1392
109	Asn Gly Tyr Val Asp Val Ala Val Gly Ala Phe Arg Ser Asp Ser Ala	
110	410 415 420 425	
111	gtc ttg cta agg aca aga cct gta gta att gtt gac gct tct tta agc	1440
112	Val Leu Leu Arg Thr Arg Pro Val Val Ile Val Asp Ala Ser Leu Ser	
113	430 435 440	
114	cac cct gag tca gta aat aga acg aaa ttt gac tgt gtt gaa aat gga	1488
115	His Pro Glu Ser Val Asn Arg Thr Lys Phe Asp Cys Val Glu Asn Gly	
116	445 450 455	
117	tggt cct tct gtg tgc ata gat cta aca ctt tgt ttc tca tat aag ggc	1536
118	Trp Pro Ser Val Cys Ile Asp Leu Thr Leu Cys Phe Ser Tyr Lys Gly	
119	460 465 470	
120	aag gaa gtt cca ggt tac att gtt ttg ttt tat aac atg agt ttg gat	1584
121	Lys Glu Val Pro Gly Tyr Ile Val Leu Phe Tyr Asn Met Ser Leu Asp	
122	475 480 485	
123	gtg aac aga aag gca gag tct cca cca aga ttc tat ttc tct tct aat	1632
124	Val Asn Arg Lys Ala Glu Ser Pro Pro Arg Phe Tyr Phe Ser Ser Asn	
125	490 495 500 505	
126	gga act tct gac gtg att aca gga agc ata cag gtg tcc agc aga gaa	1680
127	Gly Thr Ser Asp Val Ile Thr Gly Ser Ile Gln Val Ser Ser Arg Glu	
128	510 515 520	
129	gct aac tgt aga aca cat caa gca ttt atg cgg aaa gat gtg cgg gac	1728
130	Ala Asn Cys Arg Thr His Gln Ala Phe Met Arg Lys Asp Val Arg Asp	
131	525 530 535	
132	atc ctc acc cca att cag att gaa gct gct tac cac ctt ggt cct cat	1776
133	Ile Leu Thr Pro Ile Gln Ile Glu Ala Ala Tyr His Leu Gly Pro His	
134	540 545 550	
135	gtc atc agt aaa cga agt aca gag gaa ttc cca cca ctt cag cca att	1824
136	Val Ile Ser Lys Arg Ser Thr Glu Glu Phe Pro Pro Leu Gln Pro Ile	
137	555 560 565	
138	ctt cag cag aag aaa gaa aaa gac ata atg aaa aaa aca ata aac ttt	1872
139	Leu Gln Gln Lys Lys Glu Lys Asp Ile Met Lys Lys Thr Ile Asn Phe	

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:10:50

Input Set: I155514.RAW

140	570	575	580	585	
141	gca agg ttt tgt gcc cat gaa aat tgt tct gct gat tta cag gtt tct	1920			
142	Ala Arg Phe Cys Ala His Glu Asn Cys Ser Ala Asp Leu Gln Val Ser				
143	590	595	600		
144	gca aag att ggg ttt ttg aag ccc cat gaa aat aaa aca tat ctt gct	1968			
145	Ala Lys Ile Gly Phe Leu Lys Pro His Glu Asn Lys Thr Tyr Leu Ala				
146	605	610	615		
147	gtt ggg agt atg aag aca ttg atg ttg aat gtg tcc ttg ttt aat gct	2016			
148	Val Gly Ser Met Lys Thr Leu Met Leu Asn Val Ser Leu Phe Asn Ala				
149	620	625	630		
150	gga gat gat gca tat gaa acg act cta cat gtc aaa cta ccc gtg ggt	2064			
151	Gly Asp Asp Ala Tyr Glu Thr Thr Leu His Val Lys Leu Pro Val Gly				
152	635	640	645		
153	ctt tat ttc att aag att tta gag ctg gaa gag aag caa ata aac tgt	2112			
154	Leu Tyr Phe Ile Lys Ile Leu Glu Leu Glu Glu Lys Gln Ile Asn Cys				
155	650	655	660	665	
156	gaa gtc aca gat aac tct ggc gtg gta caa ctt gac tgc agt att ggc	2160			
157	Glu Val Thr Asp Asn Ser Gly Val Val Gln Leu Asp Cys Ser Ile Gly				
158	670	675	680		
159	tat ata tat gta gat cat ctc tca agg ata gat att agc ttt ctc ctg	2208			
160	Tyr Ile Tyr Val Asp His Leu Ser Arg Ile Asp Ile Ser Phe Leu Leu				
161	685	690	695		
162	gat gtg agc tca ctc agc aga gcg gaa gag gac ctc agt atc aca gtg	2256			
163	Asp Val Ser Ser Leu Ser Arg Ala Glu Glu Asp Leu Ser Ile Thr Val				
164	700	705	710		
165	cat gct acc tgt gaa aat gaa gag gaa atg gac aat cta aag cac agc	2304			
166	His Ala Thr Cys Glu Asn Glu Glu Glu Met Asp Asn Leu Lys His Ser				
167	715	720	725		
168	aga gtg act gta gca ata cct tta aaa tat gag gtt aag ctg act gtt	2352			
169	Arg Val Thr Val Ala Ile Pro Leu Lys Tyr Glu Val Lys Leu Thr Val				
170	730	735	740	745	
171	cat ggg ttt gta aac cca act tca ttt gtg tat gga tca aat gat gaa	2400			
172	His Gly Phe Val Asn Pro Thr Ser Phe Val Tyr Gly Ser Asn Asp Glu				
173	750	755	760		
174	aat gag cct gaa acg tgc atg gtg gag aaa atg aac tta act ttc cat	2448			
175	Asn Glu Pro Glu Thr Cys Met Val Glu Lys Met Asn Leu Thr Phe His				
176	765	770	775		
177	gtt atc aac act ggc aat agt atg gct ccc aat gtt agt gtg gaa ata	2496			
178	Val Ile Asn Thr Gly Asn Ser Met Ala Pro Asn Val Ser Val Glu Ile				
179	780	785	790		
E--> 180	atg gta cca aat tct ttt agc ccc caa act gat aag ctg ttc aac att	2588	2544		
181	Met Val Pro Asn Ser Phe Ser Pro Gln Thr Asp Lys Leu Phe Asn Ile				
182	795	800	805		
183	ttg gat gtc cag act act act gga gaa tgc cac ttt gaa aat tat caa	2592			
184	Leu Asp Val Gln Thr Thr Thr Gly Glu Cys His Phe Glu Asn Tyr Gln				
185	810	815	820	825	
186	aga gtg tgt gca tta gag cag caa aag agt gca atg cag acc ttg aaa	2640			
187	Arg Val Cys Ala Leu Glu Gln Gln Lys Ser Ala Met Gln Thr Leu Lys				
188	830	835	840		
189	ggc ata gtc cgg ttc ttg tcc aag act gat aag agg cta ttg tac tgc	2688			

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RAW SEQUENCE LISTING
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DATE: 02/03/2000
TIME: 13:10:50

Input Set: I155514.RAW

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191                845                      850                      855
192      ata aaa gct gat cca cat tgt tta aat ttc ttg tgt aat ttt ggg aaa      2736
193      Ile Lys Ala Asp Pro His Cys Leu Asn Phe Leu Cys Asn Phe Gly Lys
194                860                      865                      870
195      atg gaa agt gga aaa gaa gcc agt gtt cat atc caa ctg gaa ggc cgg      2784
196      Met Glu Ser Gly Lys Glu Ala Ser Val His Ile Gln Leu Glu Gly Arg
197                875                      880                      885
198      cca tcc att tta gaa atg gat gag act tca gca ctc aag ttt gaa ata      2832
199      Pro Ser Ile Leu Glu Met Asp Glu Thr Ser Ala Leu Lys Phe Glu Ile
200      890                      895                      900                      905
201      aga gca aca ggt ttt cca gag cca aat cca aga gta att gaa cta aac      2880
202      Arg Ala Thr Gly Phe Pro Glu Pro Asn Pro Arg Val Ile Glu Leu Asn
203                910                      915                      920
204      aag gat gag aat gtt gcg cat gtt cta ctg gaa gga cta cat cat caa      2928
205      Lys Asp Glu Asn Val Ala His Val Leu Leu Glu Gly Leu His His Gln
206                925                      930                      935
207      aga ccc aaa cgt tat ttc acg gat ccc gag ctgctggaag caggctcagc      2978
208      Arg Pro Lys Arg Tyr Phe Thr Asp Pro Glu
209                940                      945
210      gctcctgcct ggacgcatcc cggctatgca gcccagtc agggcagcaa ggcaggcccc 3038
211      gtctgcctct tcacccggag cctctgcccg cccactcat gctcaggag agggctcttct 3098
212      ggctttttcc caggctctgg gcaggcacag gctaggtgcc cctaaccag gccctgcaca 3158
213      caaaggggca ggtgctgggc tcagacctgc caagagccat atccgggagg accctgcccc 3218
214      tgacctaacg ccaccccaaa ggccaaactc tccactccct cagctcggac accttctctc 3278
215      ctcccagatt ccagtaactc ccaatcttct ctctgca gag ccc aaa tct tgt gac 3333
216                                Glu Pro Lys Ser Cys Asp
217                                950
218      aaa act cac aca tgc cca ccg tgc cca ggtaagccag ccaggcctc      3380
219      Lys Thr His Thr Cys Pro Pro Cys Pro
220      955                      960
221      gccctccagc tcaaggcggg acaggtgccc tagagtagcc tgcattccagg gacaggcccc 3440
222      agccgggtgc tgacacgtcc acctccatct ctctctca gca cct gaa ctc ctg      3493
223                                Ala Pro Glu Leu Leu
224                                965
225      ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa ccc aag gac acc ctc      3541
226      Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
227      970                      975                      980
228      atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gtg gac gtg agc      3589
229      Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
230      985                      990                      995
231      cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag      3637
232      His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
233      1000                      1005                      1010                      1015
234      gtg cat aat gcc aag aca aag ccg cgg gag gag cag tac aac agc acg      3685
235      Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
236      1020                      1025                      1030
237      tac cgg gtg gtc agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat      3733
238      Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
239      1035                      1040                      1045

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:10:50

Input Set: I155514.RAW

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242           1050                      1055                      1060
243   atc gag aaa acc atc tcc aaa gcc aaa ggtgggaccc gtgggggtgcg   3828
244   Ile Glu Lys Thr Ile Ser Lys Ala Lys
245           1065                      1070
246   agggccacat ggacagaggc cggctcggcc caccctctgc cctgagagtg accgctgtac 3888
247   caacctctgt cctaca ggg cag ccc cga gaa cca cag gtg tac acc ctg   3937
248           Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
249           1075                      1080
250   ccc cca tcc cgg gat gag ctg acc aag aac cag gtc agc ctg acc tgc   3985
251   Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys
252           1085                      1090                      1095
253   ctg gtc aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag agc   4033
254   Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
255   1100                      1105                      1110                      1115
256   aat ggg cag ccg gag aac aac tac aag acc acg cct ccc gtg ctg gat   4081
257   Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
258           1120                      1125                      1130
259   tcc gac ggc tcc ttc ttc ctc tac agc aag ctc acc gtg gac aag agc   4129
260   Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
261           1135                      1140                      1145
262   agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag gct   4177
263   Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
264           1150                      1155                      1160
265   ctg cac aac cac tac acg cag aag agc ctc tcc ctg tct ccg ggt aaa   4225
266   Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
267           1165                      1170                      1175
268   tga   4228

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269 <210> 19
270 <211> 4675
271 <212> DNA
272 <213> Homo sapien
273 <220>
274 <221> CDS
275 <222> 1...3405, 3763...3807, 3926...4255, 4352...4675
276 <300>
277 <400> 19

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278   atg ggg cca gaa cgg aca ggg gcc gcg ccg ctg ccg ctg ctg ctg gtg   48
279   Met Gly Pro Glu Arg Thr Gly Ala Ala Pro Leu Pro Leu Leu Leu Val
280           -25                      -20                      -15
281   tta gcg ctc agt caa ggc att tta aat tgt tgt ttg gcc tac aat gtt   96
282   Leu Ala Leu Ser Gln Gly Ile Leu Asn Cys Cys Leu Ala Tyr Asn Val
283           -10                      -5                      1
E--> 284   ggt ctc cca gaa gca aaa ata ttt tcc ggt cct tca agt gaa cag ttt
285   Gly Leu Pro Glu Ala Lys Ile Phe Ser Gly Pro Ser Ser Glu Gln Phe
286           5                      10                      15
287   ggg tat gca gtg cag cag ttt ata aat cca aaa gcc aac tgg tta ctg   192
288   Gly Tyr Ala Val Gln Gln Phe Ile Asn Pro Lys Gly Asn Trp Leu Leu

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:10:50

Input Set: I155514.RAW

289	20	25	30	35	
290	gtt ggt tca ccc tgg agt ggc ttt cct gag aac cga atg gga gat gtg	240			
291	Val Gly Ser Pro Trp Ser Gly Phe Pro Glu Asn Arg Met Gly Asp Val				
292	40	45	50		
293	tat aaa tgt cct gtt gac cta tcc act gcc aca tgt gaa aaa cta aat	288			
294	Tyr Lys Cys Pro Val Asp Leu Ser Thr Ala Thr Cys Glu Lys Leu Asn				
295	55	60	65		
296	ttg caa act tca aca agc att cca aat gtt act gag atg aaa acc aac	336			
297	Leu Gln Thr Ser Thr Ser Ile Pro Asn Val Thr Glu Met Lys Thr Asn				
298	70	75	80		
299	atg agc ctc ggc ttg atc ctc acc agg aac atg gga act gga ggt ttt	384			
300	Met Ser Leu Gly Leu Ile Leu Thr Arg Asn Met Gly Thr Gly Gly Phe				
301	85	90	95		
302	ctc aca tgt ggt cct ctg tgg gca cag caa tgt ggg aat cag tat tac	432			
303	Leu Thr Cys Gly Pro Leu Trp Ala Gln Gln Cys Gly Asn Gln Tyr Tyr				
304	100	105	110	115	
305	aca acg ggt gtg tgt tct gac atc agt cct gat ttt cag ctc tca gcc	480			
306	Thr Thr Gly Val Cys Ser Asp Ile Ser Pro Asp Phe Gln Leu Ser Ala				
307	120	125	130		
308	agc ttc tca cct gca act cag ccc tgc cct tcc ctc ata gat gtt gtg	528			
309	Ser Phe Ser Pro Ala Thr Gln Pro Cys Pro Ser Leu Ile Asp Val Val				
310	135	140	145		
311	gtt gtg tgt gat gaa tca aat agt att tat cct tgg gat gca gta aag	576			
312	Val Val Cys Asp Glu Ser Asn Ser Ile Tyr Pro Trp Asp Ala Val Lys				
313	150	155	160		
314	aat ttt ttg gaa aaa ttt gta caa ggc ctt gat ata ggc ccc aca aag	624			
315	Asn Phe Leu Glu Lys Phe Val Gln Gly Leu Asp Ile Gly Pro Thr Lys				
316	165	170	175		
317	aca cag gtg ggg tta att cag tat gcc aat aat cca aga gtt gtg ttt	672			
318	Thr Gln Val Gly Leu Ile Gln Tyr Ala Asn Asn Pro Arg Val Val Phe				
319	180	185	190	195	
320	aac ttg aac aca tat aaa acc aaa gaa gaa atg att gta gca aca tcc	720			
321	Asn Leu Asn Thr Tyr Lys Thr Lys Glu Glu Met Ile Val Ala Thr Ser				
322	200	205	210		
323	cag aca tcc caa tat ggt ggg gac ctc aca aac aca ttc gga gca att	768			
324	Gln Thr Ser Gln Tyr Gly Gly Asp Leu Thr Asn Thr Phe Gly Ala Ile				
325	215	220	225		
326	caa tat gca aga aaa tat gcc tat tca gca gct tct ggt ggg cga cga	816			
327	Gln Tyr Ala Arg Lys Tyr Ala Tyr Ser Ala Ala Ser Gly Gly Arg Arg				
328	230	235	240		
329	agt gct acg aaa gta atg gta gtt gta act gac ggt gaa tca cat gat	864			
330	Ser Ala Thr Lys Val Met Val Val Val Thr Asp Gly Glu Ser His Asp				
331	245	250	255		
332	ggt tca atg ttg aaa gct gtg att gat caa tgc aac cat gac aat ata	912			
333	Gly Ser Met Leu Lys Ala Val Ile Asp Gln Cys Asn His Asp Asn Ile				
334	260	265	270	275	
335	ctg agg ttt ggc ata gca gtt ctt ggg tac tta aac aga aac gcc ctt	960			
336	Leu Arg Phe Gly Ile Ala Val Leu Gly Tyr Leu Asn Arg Asn Ala Leu				
337	280	285	290		
338	gat act aaa aat tta ata aaa gaa ata aaa gcg atc gct agt att cca	1008			

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RAW SEQUENCE LISTING
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 DATE: 02/03/2000
 TIME: 13:10:50

Input Set: I155514.RAW

339	Asp Thr Lys Asn Leu Ile Lys Glu Ile Lys Ala Ile Ala Ser Ile Pro	
340	295 300 305	
341	aca gaa aga tac ttt ttc aat gtg tct gat gaa gca gct cta cta gaa	1056
342	Thr Glu Arg Tyr Phe Phe Asn Val Ser Asp Glu Ala Ala Leu Leu Glu	
343	310 315 320	
344	aag gct ggg aca tta gga gaa caa att ttc agc att gaa ggt act gtt	1104
345	Lys Ala Gly Thr Leu Gly Glu Gln Ile Phe Ser Ile Glu Gly Thr Val	
346	325 330 335	
347	caa gga gga gac aac ttt cag atg gaa atg tca caa gtg gga ttc agt	1152
348	Gln Gly Gly Asp Asn Phe Gln Met Glu Met Ser Gln Val Gly Phe Ser	
349	340 345 350 355	
350	gca gat tac tct tct caa aat gat att ctg atg ctg ggt gca gtg gga	1200
351	Ala Asp Tyr Ser Ser Gln Asn Asp Ile Leu Met Leu Gly Ala Val Gly	
352	360 365 370	
353	gct ttt ggc tgg agt ggg acc att gtc cag aag aca tct cat ggc cat	1248
354	Ala Phe Gly Trp Ser Gly Thr Ile Val Gln Lys Thr Ser His Gly His	
355	375 380 385	
356	ttg atc ttt cct aaa caa gcc ttt gac caa att ctg cag gac aga aat	1296
357	Leu Ile Phe Pro Lys Gln Ala Phe Asp Gln Ile Leu Gln Asp Arg Asn	
358	390 395 400	
359	cac agt tca tat tta ggt tac tct gtg gct gca att tct act gga gaa	1344
360	His Ser Ser Tyr Leu Gly Tyr Ser Val Ala Ala Ile Ser Thr Gly Glu	
361	405 410 415	
362	agc act cac ttt gtt gct ggt gct cct cgg gca aat tat acc ggc cag	1392
363	Ser Thr His Phe Val Ala Gly Ala Pro Arg Ala Asn Tyr Thr Gly Gln	
364	420 425 430 435	
365	ata gtg cta tat agt gtg aat gag aat ggc aat atc acg gtt att cag	1440
366	Ile Val Leu Tyr Ser Val Asn Glu Asn Gly Asn Ile Thr Val Ile Gln	
367	440 445 450	
368	gct cac cga ggt gac cag att ggc tcc tat ttt ggt agt gtg ctg tgt	1488
369	Ala His Arg Gly Asp Gln Ile Gly Ser Tyr Phe Gly Ser Val Leu Cys	
370	455 460 465	
371	tca gtt gat gtg gat aaa gac acc att aca gac gtg ctc ttg gta ggt	1536
372	Ser Val Asp Val Asp Lys Asp Thr Ile Thr Asp Val Leu Leu Val Gly	
373	470 475 480	
374	gca cca atg tac atg agt gac cta aag aaa gag gaa gga aga gtc tac	1584
375	Ala Pro Met Tyr Met Ser Asp Leu Lys Lys Glu Glu Gly Arg Val Tyr	
376	485 490 495	
377	ctg ttt act atc aaa aag ggc att ttg ggt cag cac caa ttt ctt gaa	1632
378	Leu Phe Thr Ile Lys Lys Gly Ile Leu Gly Gln His Gln Phe Leu Glu	
379	500 505 510 515	
380	ggc ccc gag ggc att gaa aac act cga ttt ggt tca gca att gca gct	1680
381	Gly Pro Glu Gly Ile Glu Asn Thr Arg Phe Gly Ser Ala Ile Ala Ala	
382	520 525 530	
383	ctt tca gac atc aac atg gat ggc ttt aat gat gtg att gtt ggt tca	1728
384	Leu Ser Asp Ile Asn Met Asp Gly Phe Asn Asp Val Ile Val Gly Ser	
385	535 540 545	
386	cca cta gaa aat cag aat tct gga gct gta tac att tac aat ggt cat	1776
387	Pro Leu Glu Asn Gln Asn Ser Gly Ala Val Tyr Ile Tyr Asn Gly His	
388	550 555 560	

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

 DATE: 02/03/2000
 TIME: 13:10:50

Input Set: I155514.RAW

389	cag ggc act atc cgc aca aag tat tcc cag aaa atc ttg gga tcc gat	1824
390	Gln Gly Thr Ile Arg Thr Lys Tyr Ser Gln Lys Ile Leu Gly Ser Asp	
391	565 570 575	
392	gga gcc ttt agg agc cat ctc cag tac ttt ggg agg tcc ttg gat ggc	1872
393	Gly Ala Phe Arg Ser His Leu Gln Tyr Phe Gly Arg Ser Leu Asp Gly	
394	580 585 590 595	
395	tat gga gat tta aat ggg gat tcc atc acc gat gtg tct att ggt gcc	1920
396	Tyr Gly Asp Leu Asn Gly Asp Ser Ile Thr Asp Val Ser Ile Gly Ala	
397	600 605 610	
398	ttt gga caa gtg gtt caa ctc tgg tca caa agt att gct gat gta gct	1968
399	Phe Gly Gln Val Val Gln Leu Trp Ser Gln Ser Ile Ala Asp Val Ala	
400	615 620 625	
401	ata gaa gct tca ttc aca cca gaa aaa atc act ttg gtc aac aag aat	2016
402	Ile Glu Ala Ser Phe Thr Pro Glu Lys Ile Thr Leu Val Asn Lys Asn	
403	630 635 640	
404	gct cag ata att ctc aaa ctc tgc ttc agt gca aag ttc aga cct act	2064
405	Ala Gln Ile Ile Leu Lys Leu Cys Phe Ser Ala Lys Phe Arg Pro Thr	
406	645 650 655	
407	aag caa aac aat caa gtg gcc att gta tat aac atc aca ctt gat gca	2112
408	Lys Gln Asn Asn Gln Val Ala Ile Val Tyr Asn Ile Thr Leu Asp Ala	
409	660 665 670 675	
410	gat gga ttt tca tcc aga gta acc tcc agg ggg tta ttt aaa gaa aac	2160
411	Asp Gly Phe Ser Ser Arg Val Thr Ser Arg Gly Leu Phe Lys Glu Asn	
412	680 685 690	
413	aat gaa agg tgc ctg cag aag aat atg gta gta aat caa gca cag agt	2208
414	Asn Glu Arg Cys Leu Gln Lys Asn Met Val Val Asn Gln Ala Gln Ser	
415	695 700 705	
416	tgc ccc gag cac atc att tat ata cag gag ccc tct gat gtt gtc aac	2256
417	Cys Pro Glu His Ile Ile Tyr Ile Gln Glu Pro Ser Asp Val Val Asn	
418	710 715 720	
419	tct ttg gat ttg cgt gtg gac atc agt ctg gaa aac cct ggc act agc	2304
420	Ser Leu Asp Leu Arg Val Asp Ile Ser Leu Glu Asn Pro Gly Thr Ser	
421	725 730 735	
422	cct gcc ctt gaa gcc tat tct gag act gcc aag gtc ttc agt att cct	2352
423	Pro Ala Leu Glu Ala Tyr Ser Glu Thr Ala Lys Val Phe Ser Ile Pro	
424	740 745 750 755	
425	ttc cac aaa gac tgt ggt gag gat gga ctt tgc att tct gat cta gtc	2400
426	Phe His Lys Asp Cys Gly Glu Asp Gly Leu Cys Ile Ser Asp Leu Val	
427	760 765 770	
428	cta gat gtc cga caa ata cca gct gct caa gaa caa ccc ttt att gtc	2448
429	Leu Asp Val Arg Gln Ile Pro Ala Ala Gln Glu Gln Pro Phe Ile Val	
430	775 780 785	
431	agc aac caa aac aaa agg tta aca ttt tca gta aca ctg aaa aat aaa	2496
432	Ser Asn Gln Asn Lys Arg Leu Thr Phe Ser Val Thr Leu Lys Asn Lys	
433	790 795 800	
434	agg gaa agt gca tac aac act gga att gtt gtt gat ttt tca gaa aac	2544
435	Arg Glu Ser Ala Tyr Asn Thr Gly Ile Val Val Asp Phe Ser Glu Asn	
436	805 810 815	
437	ttg ttt ttt gca tca ttc tcc cta ccg gtt gat ggg aca gaa gta aca	2592
438	Leu Phe Phe Ala Ser Phe Ser Leu Pro Val Asp Gly Thr Glu Val Thr	

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

 DATE: 02/03/2000
 TIME: 13:10:50

Input Set: I155514.RAW

439	820	825	830	835	
440	tgc cag gtg gct gca tct cag aag tct gtt gcc tgc gat gta ggc tac	2640			
441	Cys Gln Val Ala Ala Ser Gln Lys Ser Val Ala Cys Asp Val Gly Tyr				
442	840	845	850		
443	cct gct tta aag aga gaa caa cag gtg act ttt act att aac ttt gac	2688			
444	Pro Ala Leu Lys Arg Glu Gln Gln Val Thr Phe Thr Ile Asn Phe Asp				
445	855	860	865		
446	ttc aat ctt caa aac ctt cag aat cag gcg tct ctc agt ttc caa gcc	2736			
447	Phe Asn Leu Gln Asn Leu Gln Asn Gln Ala Ser Leu Ser Phe Gln Ala				
448	870	875	880		
449	tta agt gaa agc caa gaa gaa aac aag gct gat aat ttg gtc aac ctc	2784			
450	Leu Ser Glu Ser Gln Glu Glu Asn Lys Ala Asp Asn Leu Val Asn Leu				
451	885	890	895		
452	aaa att cct ctc ctg tat gat gct gaa att cac tta aca aga tct acc	2832			
453	Lys Ile Pro Leu Leu Tyr Asp Ala Glu Ile His Leu Thr Arg Ser Thr				
454	900	905	910	915	
455	aac ata aat ttt tat gaa atc tct tcg gat ggg aat gtt cct tca atc	2880			
456	Asn Ile Asn Phe Tyr Glu Ile Ser Ser Asp Gly Asn Val Pro Ser Ile				
457	920	925	930		
458	gtg cac agt ttt gaa gat gtt ggt cca aaa ttc atc ttc tcc ctg aag	2928			
459	Val His Ser Phe Glu Asp Val Gly Pro Lys Phe Ile Phe Ser Leu Lys				
460	935	940	945		
461	gta aca aca gga agt gtt cca gta agc atg gca act gta atc atc cac	2976			
462	Val Thr Thr Gly Ser Val Pro Val Ser Met Ala Thr Val Ile Ile His				
463	950	955	960		
464	atc cct cag tat acc aaa gaa aag aac cca ctg atg tac cta act ggg	3024			
465	Ile Pro Gln Tyr Thr Lys Glu Lys Asn Pro Leu Met Tyr Leu Thr Gly				
466	965	970	975		
467	gtg caa aca gac aag gct ggt gac atc agt tgt aat gca gat atc aat	3072			
468	Val Gln Thr Asp Lys Ala Gly Asp Ile Ser Cys Asn Ala Asp Ile Asn				
469	980	985	990	995	
470	cca ctg aaa ata gga caa aca tct tct tct gta tct ttc aaa agt gaa	3120			
471	Pro Leu Lys Ile Gly Gln Thr Ser Ser Ser Val Ser Phe Lys Ser Glu				
472	1000	1005	1010		
473	aat ttc agg cac acc aaa gaa ttg aac tgc aga act gct tcc tgt agt	3168			
474	Asn Phe Arg His Thr Lys Glu Leu Asn Cys Arg Thr Ala Ser Cys Ser				
475	1015	1020	1025		
476	aat gtt acc tgc tgg ttg aaa gac gtt cac atg aaa gga gaa tac ttt	3216			
477	Asn Val Thr Cys Trp Leu Lys Asp Val His Met Lys Gly Glu Tyr Phe				
478	1030	1035	1040		
479	gtt aat gtg act acc aga att tgg aac ggg act ttc gca tca tca acg	3264			
480	Val Asn Val Thr Thr Arg Ile Trp Asn Gly Thr Phe Ala Ser Ser Thr				
481	1045	1050	1055		
482	ttc cag aca gta cag cta acg gca gct gca gaa atc aac acc tat aac	3312			
483	Phe Gln Thr Val Gln Leu Thr Ala Ala Ala Glu Ile Asn Thr Tyr Asn				
484	1060	1065	1070	1075	
485	cct gag ata tat gtg att gaa gat aac act gtt acg att ccc ctg atg	3360			
486	Pro Glu Ile Tyr Val Ile Glu Asp Asn Thr Val Thr Ile Pro Leu Met				
487	1080	1085	1090		
488	ata atg aaa cct gat gag aaa gcc gaa gta cca aca gat ccc gag	3405			

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
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Input Set: I155514.RAW

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489   Ile Met Lys Pro Asp Glu Lys Ala Glu Val Pro Thr Asp Pro Glu
490           1095                      1100                      1105
491   ctgctggaag caggctcagc gctcctgcct ggacgcatcc cggctatgca gccccagtcc 3465
492   agggcagcaa ggcaggcccc gtctgcctct tcacccggag cctctgcccg cccactcat 3525
493   gctcagggag agggctcttct ggctttttcc caggctctgg gcaggcacag gctaggtgcc 3585
494   cctaaccagc gccctgcaca caaaggggca ggtgctgggc tcagacctgc caagagccat 3645
495   atccgggagg accctgcccc tgacctaacg ccaccccaaa ggccaaactc tccactccct 3705
496   cagctcggac accttctctc ctcccagatt ccagtaactc ccaatcttct ctctgca 3762
497   gag ccc aaa tct tgt gac aaa act cac aca tgc cca ccg tgc cca 3807
498   Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro
499           1110                      1115                      1120
500   ggtaagccag cccaggcctc gccctccagc tcaaggcggg acaggtgccc tagagtagcc 3867
501   tgcattccagg gacaggcccc agccgggtgc tgacacgtcc acctccatct cttcctca 3925
502   gca cct gaa ctg ctg ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa 3973
503   Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
504           1125                      1130                      1135
505   ccc aag gac acc ctg atg atc tcc cgg acc cct gag gtc aca tgc gtg 4021
506   Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
507           1140                      1145                      1150
508   gtg gtg gac gtg agc cac gaa gac cct gag gtc aag ttc aac tgg tac 4069
509   Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
510           1155                      1160                      1165
511   gtg gac ggc gtg gag gtg cat aat gcc aag aca aag ccg cgg gag gag 4117
512   Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
513   1170                      1175                      1180                      1185
514   cag tac aac agc acg tac cgg gtg gtc agc gtc ctc acc gtc ctg cac 4165
515   Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
516           1190                      1195                      1200
517   cag gac tgg ctg aat ggc aag gag tac aag tgc aag gtc tcc aac aaa 4213
518   Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
519           1205                      1210                      1215
520   gcc ctg cca gcc ccc atc gag aaa acc atc tcc aaa gcc aaa 4255
521   Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
522           1220                      1225                      1230
523   ggtgggaccc gtgggggtgcg agggccacat ggacagaggc cggctcggcc caccctctgc 4315
524   cctgagagtg accgctgtac caacctctgt cctaca ggg cag ccc cga gaa cca 4369
525   Gly Gln Pro Arg Glu Pro
526           1235
527   cag gtg tac acc ctg ccc cca tcc cgg gat gag ctg acc aag aac cag 4417
528   Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
529           1240                      1245                      1250
530   gtc agc ctg acc tgc ctg gtc aaa ggc ttc tat ccc agc gac atc gcc 4465
531   Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
532           1255                      1260                      1265
533   gtg gag tgg gag agc aat ggg cag ccg gag aac aac tac aag acc acg 4513
534   Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
535   1270                      1275                      1280                      1285
536   cct ccc gtg ctg gat tcc gac ggc tcc ttc ttc ctc tac agc aag ctc 4561
537   Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
538           1290                      1295                      1300

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/155,514DATE: 02/03/2000
TIME: 13:10:50

Input Set: I155514.RAW

539	acc gtg gac aag agc agg tgg cag cag ggg aac gtc ttc tca tgc tcc	4609
540	Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser	
541	1305 1310 1315	
542	gtg atg cat gag gct ctg cac aac cac tac acg cag aag agc ctc tcc	4657
543	Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser	
544	1320 1325 1330	
545	ctg tct ccg ggt aaa tga	4675
546	Leu Ser Pro Gly Lys	
547	1335	

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VERIFICATION SUMMARY
PATENT APPLICATION US/09/155,514

DATE: 02/03/2000
TIME: 13:10:50

Input Set: I155514.RAW

Line ? Error/Warning

Original Text.

180 E Number of Bases conflict w/ Running Total atg gta cca aat tct ttt agc ccc caa act g

284 E Number of Bases conflict w/ Running Total ggt ctc cca gaa gca aaa ata ttt tcc ggt c